AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A system that facilitates state machine power management, comprising:

a state management component that receives at least one signal that is directed to a state machine, the state management component evaluates the signal to ascertain whether at least one of a coprocessor or the state machine services the signal based in part on determined processing requirements of the signal, the evaluation includes intelligent analysis comprising at least one of a rule base or employ at least one of statistics, inferences, probabilities, classifiers, decision tree learning methods, support vector machines, linear and non-linear regression or neural networks to facilitate decision-making, the state management component determines if the state machine should continue receiving signals after the state machine is invoked to service a signal based in part on the intelligent analysis;

the coprocessor services the signal in order to provide a timely response to the signal and facilitates state machine power management without transitioning the state machine to a high power state if determined that the coprocessor can completely service the received signal based on the evaluation; and

the state machine services the signal upon evaluation that the coprocessor cannot service the signal without transitioning the state machine to the high power state.

2. (Original) The system of claim 1, the state machine employs the state management component to receive the signal when the state machine transitions from a high power state to a lower power state.

3. (Original) The system of claim 2, the lower power state comprises one of a standby state, a suspend state, a hibernate state, a sleep state, a deep sleep state, and an off state.

4. (Original) The system of claim 1, further comprising an analysis component that interprets the signal.

5. (Original) The system of claim 1, further comprising a decision component that determines whether the coprocessor should respond to the signal.

6. (Original) The system of claim 1, the state management component is activated by one of the state machine requesting the services of the state management component and the state management component detecting the state machine transitioned to the lower power state.

7. (Original) The system of claim 1, the system consumes less or equal power when the coprocessor responds to the signal in comparison to when the state machine responds to the signal.

8. (Original) The system of claim 1, the state management component is employed to concurrently manage wake states for a plurality of state machines.

9. (Original) The system of claim 1, further comprising an intelligence component that facilitates at least one of interpreting the signal and distributing the signal for processing.

10. (Original) The system of claim 1, the state management component invokes the state machine to respond to the signal when the coprocessor cannot respond to the signal.

11. (Original) The system of claim 1, the signal is transmitted over one of a network, a backplane, and a bus.

12. (Original) The system of claim 1, the state management component is employed to reduce state machine load for a state machine in a full power state.

13. (Currently Amended) A method that manages wake states for state machines, comprising:

receiving a signal transmitted to a state machine;

intelligently interpreting the signal, the interpretation can include at least one of a rule base or employ at least one of statistics, inferences, probabilities, classifiers, decision tree learning methods, support vector machines, linear and non-linear regression or neural networks to facilitate decision-making;

determining processing requirements of the signal based in part on the intelligent interpretation;

determining whether at least one of a coprocessor or the state machine should service the signal based on the determined processing requirements of the signal;

determining whether a coprocessor can completely service the received signal based in part on the interpretation;

invoking the coprocessor to service the signal when it is determined that the coprocessor should respond to the signal without transitioning the state machine to a high power state such that the coprocessor can completely service the received signal based in part on the determined processing requirements of the received signal; ~~and~~

invoking the state machine to service the signal when it is determined that the coprocessor cannot service the signal; and

determining if one or more state machines should continue receiving signals after the state machine is invoked to service a signal based in part on the intelligent interpretation.

14. (Original) The method of claim 13, the state machine employs the state management component when in a low power state.

15. (Original) The method of claim 13, the coprocessor is a low-power consuming device.

16. (Original) The method of claim 13, further comprising employing intelligence to facilitate at least one of interpreting the signal and determining whether the coprocessor should respond to the signal.

17. (Original) The method of claim 13, further comprising invoking the state machine to respond to the signal when it is determined that the coprocessor cannot respond to the signal.

18. (Original) The method of claim 13, further comprising receiving signals for a state machine in a full power state in order to reduce state machine load.

19. (Original) The method of claim 13, further comprising concurrently receiving signals directed to a plurality of state machines associated with at least one or more of a disparate network, a disparate bus, and a disparate backplane, wherein the coprocessor is employed to respond to at least one signal associate with at least one state machine.

20. (Currently Amended) A method that facilitates state machine power management, comprising:

activating a state manager to receive signals directed to one or more state machines residing in a low power state;

intelligently analyzing a received signal to determine processing requirements, the analysis can include at least one of a rule base or employ at least one of statistics, inferences, probabilities, classifiers, decision tree learning methods, support vector machines, linear and non-linear regression or neural networks to facilitate decision-making;

determining whether a coprocessor can completely service the received signal based in part on the analysis;

transitioning at least one of the state machines or the coprocessor to a high power state based on the processing requirements of the received signal;

interpreting the signals to determine whether at least one of a coprocessor or the state machines should process the received signal ;

employing the coprocessor to process the received signal without transitioning the state machines to a high power state when determined that the coprocessor can completely service the received signal based in part on the determined processing requirements of the received signal; ~~and~~

employing the state machines to process the received signal when determined that the coprocessor cannot service the received signal; and [[.]]

determining if the state machines should continue receiving signals after the state machine is invoked to service a signal based in part on the intelligent analysis.

21. (Original) The method of claim 20, the state manager is activated when at least one state machine transitions from a high power state to the low power state.

22. (Original) The method of claim 21, the low power state comprises one of a standby state, a suspend state, a hibernate state, a sleep state, a deep sleep state, and an off state.

23. (Original) The method of claim 20, the state manager is activated by one of a state machine request and detecting when a state machine transitions to the low power state.

24. (Original) The method of claim 20, further comprising employing at least one of the state machines to respond to the signals.

25. (Currently Amended) A data packet transmitted between two or more computer components that facilitates state machine power management, comprising:

a component that receives a signal transmitted to a state machine;

a component that intelligently analyzes the signal to determine processing requirements for the signal, the analysis can include at least one of a rule base or employ at least one of statistics, inferences, probabilities, classifiers, decision tree learning methods, support vector machines, linear and non-linear regression or neural networks to facilitate decision-making;

a component that determines whether at least one of a coprocessor or the state machine should service the incoming signal based on the processing requirements of the signal; ~~and~~

a component that invokes at least one of the coprocessor or the state machine to service the incoming signal, wherein the coprocessor responds without transitioning the state machine out of the low power state to service the signal if determined that the coprocessor can process the signal entirely based in part on the determined processing requirements; and

a component that determines if the state machine should continue receiving signals after the state machine is invoked to service a signal based in part on the intelligent analysis.

26. (Currently Amended) A computer readable medium storing computer executable components that facilitates state machine power management, comprising:

a component that a receives a signal transmitted to a state machine in a lower power state;

a component that intelligently analyzes the signal to determine processing requirements for the signal, the intelligent analysis can include at least one of a rule base or employ at least one of statistics, inferences, probabilities, classifiers, decision tree learning methods, support vector machines, linear and non-linear regression or neural networks to facilitate decision-making;

a component that interprets the signal to determine whether at least one of a coprocessor or a state machine can process the signal based in part on the determined processing requirements, the coprocessor processes the received signal without transitioning the state machines to a high power state when determined that the coprocessor can completely service the received signal based in part on the determined processing requirements of the received signal; ~~and~~

a component that processes the signal when the determined processing requirements indicate that the signal should be processed without the state machine so that the state machine remains in the lower power state, and

a component that determines if the state machine should continue receiving signals after the state machine is invoked to service a signal based in part on the intelligent analysis.

27. (Currently Amended) A system that facilitates state machine power management, comprising:

means for receiving a signal directed to a state machines in a lower power state;

means for intelligently interpreting the signal to determine the processing requirements for the signal, the interpretation can include at least one of a rule base or employ at least one of statistics, inferences, probabilities, classifiers, decision tree learning methods, support vector machines, linear and non-linear regression or neural networks to facilitate decision-making;

means for determining whether at least one of a low power element or the state machines can process the signal based in part on the determined processing requirements; ~~and~~

means for servicing the signal without transitioning the state machines to a high power state when determined that the low power element can entirely process the signal based in part on the determined processing requirements; and

means for determining if the state machines should continue receiving signals after the state machine is invoked to service a signal based in part on the intelligent analysis.